

DRAFT AGENDA with read-ahead materials noted
National Earthquake Prediction Evaluation Council (NEPEC)
October 16-17, 2017, Graduate Berkeley Hotel, Berkeley, California

Main topics:

- User needs for operational earthquake forecasts
- Coordination of earthquake forecast activities within California and in the Cascadia region
- Development of operational aftershock forecasts, forecast templates, and spatiotemporal forecasts
- Implementation of the ETAS method for computing operational earthquake forecasts
- The UCERF3-ETAS forecasting model – method, capabilities, and operational use

Day 1 (October 16, 1:00 to ~6:00 PM)

Introduction:

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|------|---|--------------------|
| 1:00 | Gather, introductions, thanks, logistics, agenda | Bürgmann, Blanpied |
| 1:20 | Meeting goals, past NEPEC recommendations | Blanpied |
| | <i>Read ahead: NEPEC_advice_OEF_Dec2015.pdf</i> | |

1. User needs and applications of earthquake forecasts:

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|------|---|-----------|
| 1:35 | Powell Center workshop findings | Field |
| 2:00 | Additional user-needs findings | Hardebeck |
| 2:20 | Overview of USGS operational earthquake forecasting strategy and status | Hardebeck |
| 2:50 | Forecast experience in New Zealand; communication strategy | McBride |
| 3:10 | Discussion | All |
| 3:30 | <i>Break</i> | |

2. Coordination of operational forecasting and communication:

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|-------|--|----------------------------|
| 3:45 | Goals of the session | Blanpied, Parrish, Hickman |
| 3:55 | California's Earthquake Response Plan | Roeloffs |
| | <i>Read ahead: California Earthquake Advisory Plan 0615 Draftjdg.doc</i> | |
| | <i>Read ahead: Roeloffs&Goltz_CA-EQ-AdvisoryPlan_SRL-2017.pdf</i> | |
| 4:15 | Updating the California Earthquake Response Plan | Parrish, Arba |
| 4:30 | Cascadia Earthquake Communication – plan & recommendations | Gomberg |
| | <i>Read ahead: Cascadia_Eq-Comm-Plan_Executive-Summary.pdf</i> | |
| | <i>Optional: Cascadia_Eq-Comm-Plan_Full-report.pdf</i> | |
| 5:00 | Discussion | All |
| ~6:00 | <i>Adjourn. Dinner in ad hoc groups for those desiring</i> | |

Day 2 (October 17, 8:00 AM to ~4:00 PM)

Introduction:

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| 8:00 | Introductions, agenda and goals, follow-ups from first day | Bürgmann, Blanpied |
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3. Operational earthquake forecasting – progress and plans:

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|------|---|--------------|
| 8:20 | Testing of the Reasenbergs and Jones method | Michael |
| 8:50 | Implementation of ETAS for temporal forecasting | van der Elst |
| | <i>Read ahead: Helmstetter-et-al_Eq-forecast-models-for-SoCal_BSSA-2006.pdf</i> | |
| 9:10 | Discussion – seeking approval for use of ETAS in OEF | All |
| 9:45 | <i>Break</i> | |

4. Spatiotemporal forecasting and map-based forecasts:

10:00	Development of spatiotemporal forecast methods	van der Elst
10:30	Demonstration of a user-tunable forecast map interface	Michael
10:45	Discussion – seeking comments on map-based operational forecast strategy	All
11:30	<i>Lunch on your own</i>	

5. The UCERF3-ETAS forecast model for California:

12:45	Overview of the UCERF3-ETAS model and its potential uses Read ahead: Field-et al _UCERF3-Synoptic-View_SRL-2017.pdf Read ahead: Field-et al _UCERF3-ETAS_BSSA-2017.pdf	Field
1:15	“Turing tests” of the model Read ahead: Page&vanderElst_UCERF3-ETAS-Turing-tests_submitted.pdf	Page
1:30	Operational status and use during the 2016 Bombay Beach swarm	Jordan, Page
1:45	Discussion – seeking advice on operational use and further R&D needs	All
2:30	<i>Break</i>	

Executive session:

2:45	Discussion, development of recommendations	NEPEC
~4:00	<i>Adjourn (timing at the discretion of the Council)</i>	

NEPEC:

Roland Bürgmann, UC Berkeley (*Chair*)
William Leith, USGS, Reston, (*Co-chair, not attending*)
Gail Atkinson, University of Ontario (*not attending*)
Cliff Frohlich, Univ. of Texas, Austin
Susan Hough, USGS, Pasadena
Andrew Michael, USGS, Menlo Park
Evelyn Roeloffs, USGS, Vancouver, WA (*outgoing member*)
Allan Rubin, Princeton University
Katherine Scharer, USGS, Pasadena (*incoming member*)
Peter Shearer, Univ. of California, San Diego (*not attending*)
John Vidale, Univ. of Southern California and SCEC
Michael Blanpied, USGS (*Secretariat*)

Guests:

Ryan Arba, California Office of Emergency Services
John Parrish, California Geological Survey (*CEPEC Chair*)
Thomas Jordan, Univ. of Southern California and SCEC (*CEPEC member*)
Edward Field, USGS, Golden
Joan Gomberg, USGS, Seattle (*by phone*)
Jeanne Hardebeck, USGS, Menlo Park
Stephen Hickman, USGS, Menlo Park
Kenneth Hudnut, USGS, Pasadena (*by phone*)
Keith Knudsen, USGS, Menlo Park
Forrest Lanning, FEMA Region IX
Sara McBride, USGS, Menlo Park
Morgan Page, USGS, Pasadena (*CEPEC member*)
Nicholas van der Elst, USGS, Pasadena